SAFETY DATA SHEET - Trio® Products

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Section I - Product and Company Identification



INTREPID POTASH – NEW MEXICO, LLC 707 17th St. Suite 4200 Denver, CO 80202

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EMERGENCIES: CALL (800)424-9300(CHEMTREC)

HEALTH EMERGENCIES: CONTACT YOUR LOCAL POISON CENTER

Common Name: Granular Trio®, Premium Trio®, Special Standard Trio ®, Standard Trio ®, OMRI Listed Granular Trio®, OMRI Listed Standard Trio®, OMRI Listed Fine Standard Trio®

Formula: K₂SO₄MgSO₄ Synonym: Sulfate of Potash Magnesia – All Grades Use: Crop Nutrient and Animal Feed

	GHS07	Hazard	Category	Hazard Code	Health Hazard Statement	
	^	Eye Irritation	2A	H319	Can cause serious eye irritation.	
Classification of the substance or mixture:		Skin Irritation	3	H316	Can cause mild skin irritation.	
	\	Respiratory Irritation	3	H335	May cause respiratory irritation.	
		Ingestion	5	H303	May be harmful if swallowed	
_abel Elements:	GHS07					
			H315 H320	Causes skii wounds).	n and eye irritation (especially in open	
		Hazard Statements	H335	May cause respiratory irritation.		
		Statements	H303	May be har	mful if swallowed.	
			P280	Wear prote	ctive clothing (see Section VII).	
	Signal Word:	Ctatamanta	y P305 P351	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to		
	WARNING	Statements	P338	do. Continu	· · ·	
NFPA	Health	Flammabili	ty HMIS		Health 1	
		0			Flammability 0	
					Physical Hazard 0	
	Special Hazard	Instabili	ty		Personal Protection E	
Carcinogenicity Lists:	ARC Monograph: N	o NTP : No	OSHA:	No		

Section III - Composition/Information on Ingredients										
					Exposur	e Limits				
Chemical Name(s)	CAS No.	OSHA	A PEL	TLV -	TWA	ST	EL	CE	IL	% by
		mg/m ³	ppm	mg/m³	ppm	mg/m³	ppm	mg/m³	ppm	Weight
Potassium Magnesium	14977-37-8	15 / 5*		10**						88-99.8
Sulfate (Langbeinite)										
Sodium Chloride	7647-14-5	15 / 5*		10**						0.5-12

^{**}Total Dust / Respirable dust

^{*}Based on ACGIH nuisance dust limits.

Section IV	- First Aid Measures
Eyes:	Rinse cautiously with water for several minutes. Flush with water, including under upper & lower lids, for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention/advice if pain and Irritation persists.
Skin:	Wash thoroughly with water. Obtain medical advice/attention if irritation persists.
Ingestion:	A large body load may cause vomiting, diarrhea, cramps, tingling in hands and feet, weak pulse, and circulatory disturbances. Administer water if patient is conscious. Ingesting will usually cause purging of the stomach by vomiting. Get Medical attention.
Inhalation:	If individual is experiencing respiratory discomfort or irritation. Remove to fresh air. If discomfort or irritation persists, get medical attention/advice.

Section V – Fire	Fightir	ng Measures		
Flash Point:		None	Auto-ignition Temperature:	Not Applicable
Lower Explosive Limit:		Not Applicable	Upper Explosive Limit:	Not Applicable
Unusual Fire and	When su	ibjected to extremely hig	th temperatures, it may release small quantities of	chlorine gas.
Explosion Hazards:				
Extinguishing Media:	As requi	red for surrounding fire.	Potash is non-flammable and does not support co	ombustion.
Special Firefighting	Firefighting Positive pressure, self-contained breathing apparatus is required for all firefighting activities involved			irefighting activities involving
Procedures and Equipment: hazardous materials. Full structural firefighting (bunker) gear is the minimum acceptable attil			num acceptable attire. The	
		need for proximity, enti	ry, flashover and/or special chemical protective clo	othing (see Section 8) needs
		to be determined for ea	ach incident by a competent firefighting safety prof	fessional. Water used for fire
		suppression and coolin	ng may become contaminated. Discharge to sewe	r system(s) or environment
	may be restricted, requiring containment and proper disposal of water.			

Section VI -	- Accidental Release Measures
Small Spill:	Sweep up and use as fertilizer if non-contaminated.
Large Spill:	Collect with appropriate equipment. If on a hard surface, sweep up residue with brooms. If on soil, remove and collect the top 5 cm of soil.
Release Notes:	Sulfate of Potash Magnesia is highly soluble and can be quickly diluted below the toxic level by relatively large amounts of water. Sulfate of Potash Magnesia which has entered a small non-permanent pond should be removed by pumping the pond dry. If spill could potentially enter any waterway, including intermittent dry creeks, contact the local authorities. If in the U.S., contact the US COAST GUARD NATIONAL RESPONSE CENTER toll free number, 800-424-8802. In case of accident or road spill notify: CHEMTREC IN USA AT 800-424-9300; CANUTEC in Canada at 613-996-6666 CHEMTREC in other countries at (International code)+1-703-527-3887.
Comments:	See Section XIII for disposal information and Section XV for regulatory requirements. Large and small spills may have a broad Definition depending on the user's handling system. Therefore, the spill category must be defined at the point of release by technically qualified personnel.

Section VII – Handling and Storage			
Ventilation:	Local exhaust to reduce dust concentrations below recommended levels.		
Handling:	Avoid generating dust by excessive or unnecessary movement.		
Storage:	Store in a dry location. Avoid contact with aluminum or carbon steel to minimize corrosion		

Section VIII - Exposure Control s/Personal Protection			
Engineering Controls:	Engineering Controls: May be necessary to minimize dust levels.		
Personal Protection:			
Eye Protection:		Use tight-fitting safety goggles in areas of high dust concentration.	
Protective Clothing:		Gloves, long sleeve shirts and long pants. Launder work clothing regularly	
Respiratory Protection:	:	Minimum NIOSH approved N95 filter type dust respirators until engineering controls are implemented.	
Other Protective Clothing or Equipment: Optional		Optional	

Section IX - Physi	Section IX – Physical and Chemical Properties						
Appearance/Color/Odor:	White to gray, crystalline to granular.						
Melting Point/Range:	1700°F	Boiling Point:	1500°C(sublimates)				
Solubility in Water:	Approximately 24.4% @ 77°F (25°C)	Boiling Point/Range:	1420 - 1500°C				
Specific Gravity:	$1.988 (H_2O = 1)$	Vapor Pressure (mmHg):	Not Applicable				
Vapor Density:	Not Applicable	Molecular Weight: sulfate)	415 (for potassium magnesium				
Bulk Density:	2.81-2.85	% Volatiles:	< 0.5				
-							
pH:	7 – 9 (in 5% solution)	Evaporation Rate:	Not Applicable				
Viscosity:	Not applicable						

Section X - Stability and Reactivity	
Stability:	Stable
Hazardous Polymerization:	Will not occur
Conditions to Avoid:	None
Materials to Avoid (Incompatibilities):	Strong Oxidizing Agents, Strong Acids & Protect From Moisture.
Hazardous Decomposition Products:	Combustion can yield oxides of sulfur when heated above 1000°F (537°C).

Section XI Toxicological	Information				
Significant Routes of Exposure:	Eyes, skin, inhalation, ingestion				
Toxicity to Animals (Sodium	Rat, oral, LD50 =3 g/kg; Mouse, oral, LD	D50 = 4g/kg			
Chloride):	Rat, LC50 > 42 g/m ³ /1hour				
	Rabbit, Eye: 100 mg/24 hour, moderate	irritant			
	Rabbit, Eye: 500 mg/ 24 hour, mild irritant				
		No skin irritation data located for sodium chloride			
Acute Inhalation Toxicity:	No data available				
Acute Toxicity: Other Routes:	No data available				
Acute Dermal Toxicity:	No data available				
Repeated Dose Toxicity:		No data available			
Eye & Skin Irritation/Corrosion:	No data available				
	Based on toxicity data for another salt compound (i.e. potassium nitrate). Not expected to be				
	toxic by dermal exposure as defined by OSHA				
	Developmental Toxicity/Teratogenicity: No data available				
Special Remarks on Tayloity to	Bacterial Genetic Toxicity In-Vitro Gene	(Saccaromyces cerevisiae) - Mitotic recombination:			
Special Remarks on Toxicity to Animals:	Mutation:	NOAEL = 300 mM.			
Animais:	Non-Bacterial Genetic Toxicity In-Vitro	No data available			
	Chromosomal Aberration:				
	Toxicity to Reproduction:	No data available			
	Carcinogenicity:	No data available			
Other Effects on Humans:	Large doses by mouth can cause gastrointe	estinal irritation, purging, weakness and circulatory			
	disturbances. Potassium chloride used as a	dietary supplement in food for human consumption is			
	generally recognized as safe (GRAS).				
Special Remarks on Chronic	Not reported to be carcinogenic mutagenic,	teratogenic or allergenic.			
Effects on Humans:		-			
Special Remarks on Other	None				
Effects on Humans:					

Section XII -	Ecological Information		
	Acute Toxicity to Fish:	When dissolved in water, sodium chloride creates an elevated level of salinity that may be harmful to fresh water aquatic species and to plants that are not salt-tolerant.	
	Chronic Toxicity to Fish:	No data available	
	Acute Toxicity to Aquatic	No data available	
Eco toxicity:	Invertebrates:		
	Chronic Toxicity to Aquatic Invertebrates:	No data available	
	Toxicity to Aquatic Plants:	No data available	
	Toxicity to Bacteria:	No data available	
	(activated sludge):		
	Toxicity to Soil Dwelling	No data available	
	Organisms:		
	Toxicity to Terrestrial Plants:	No data available	
Environmental Fate:	Stability in Water:	When dissolved in water, sodium chloride creates an elevated level of salinity that maybe harmful to fresh water aquatic species and to plants that are not salt-tolerant.	
	Stability in Soil:	No data available	
Toxicity:	Non-toxic to aquatic organisms as defined by USEPA		
Degradation	Chloride and potassium ions.		

Section XIII - Disposal Consider ations				
Product Disposal:	This material, if discarded as produced, is not an RCRA "listed" or "characteristic" hazardous waste. Contamination may subject it to hazardous waste regulations. Properly characterize all waste materials. Consult State and local regulations regarding the proper disposal of this material.			
General Comments:	Because of its solubility, potash should not be disposed of in a location where run-off will escape.			

	USDOT	TDG - Canada
Proper Shipping Name:	Not Regulated	Not Regulated
Hazard Class:		
Identification Number:		
Packing Group (Technical Name)		
Labeling/Placarding:		
Authorized Packaging:		
Notes:		
European Transportation:		

European Transportation:									
Coation VV	Deguletenula	farmat i an							
	Regulatory In	TOTTIBLETION							
UNITED STATES:									
SARA Hazard	This product has been reviewed according to the EPA Hazard Categories promulgated under Section 311 and 312								
Category:	of the Superfund Amendment and Reauthorization Act of 1986 (SARA Title III) and is considered, under applicable definitions, to meet the following categories:								
	Fire: No	Pressure Generating	: <u>No</u> Reactiv	vity: <u>No</u> Acu	ite: Yes	Chronic:	<u>No</u> .		
	40 CFR Part 355 – Extremely Hazardous Substances:								
	40 CFR Part 370 – Hazardous Chemical Reporting:								
All intentional ingredients listed on the TSCA inventory.									
SARA Title III	This product con	This product contains the following substances subject to the reporting requirements of Title III(EPCRA) of the							
Information:	Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372:								
	Chemical	CAS No.	Percent by	CERCLA RQ	SARA (1986) Reporting		orting		
			Weight	(lbs.)	311	312	313		
	Potassium Magnes	ium 14977-37-8	88-99.8	NA	No	No	No		
	Sulfate (Langbeini	te)							
	Sodium Chloride	7647-14-5	0.5-12	NA	No	No	No		

CERCLA/Superfund,	perfund, If this product contains components subject to substances designated a CERCLA Reportable Quantity (R				
40 CFR Parts 117,302:	ostances, it will be designated in the above table with the RQ value in pounds. If there is a release of				
	RQ Substance to the environment, notification to the National Response Center, Washington D.C.				
	(1-800-424-8802) is required.				
TSCA:	Sodium Chloride is listed in the TSCA Inventory. Potassium Magnesium Sulfate (langbeinite) is a naturally-occurring chemical substance processed only by mechanical means that is exempted from				
	TSCA listing per 40 CFR, PART 710.26(d).				
CANADA:					
WHMIS Hazard Symbol	Not controlled				
Classification:					
Ingredient Disclosure Li	This product does not contain ingredient(s) on this list				
Environmental Protection	All intentional ingredients are listed on the DSL (Domestic Substance List).				

Section XVI - Other Information								
NFPA Hazard Rating:	Health _	1	Fire	0	Reactivity	0	Special Hazards	
	0 = Insigni	ficant	1 = Sli	ght	2 = Moderate	3 = High	4 = Extreme	
Comments: None								
Section(s) changed since last revision: SDS is designed to comply with U.S. DOL: OSHA and MSHA HazCom standards in effect								
on the revision date.								

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief as of the revision date noted below. This information is not a warranty or quality specification. The user of the product is solely responsible for determining the suitability of use in each particular situation. This information relates only to the specific material designated and may not be valid for the material used in combination with any other materials or in any process. The user of the product assumes all risks and responsibilities in connection with the use of the product, and Intrepid will not be responsible for any damages relating to the use of the product.

(Revision Date 05/16)